

BUMELIA RECLINATA VAR. *AUSTROFLORIDENSIS*
(SAPOTACEAE), A NEW VARIETY FROM
SOUTH FLORIDA, U.S.A.¹

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ABSTRACT

Taxonomic studies in the Sapotaceae of the Southeastern United States support the recognition of three infraspecific taxa of *Bumelia reclinata* (Michaux) Ventenat: var. *reclinata*, var. *rufotomentosa* (Small) Cronquist, and var. *austrofloridensis* Whetstone, var. nov. A key to the infraspecific taxa and distribution map are included.

Bumelia reclinata is endemic to the outer Coastal Plain of the Southeastern United States. Members of this genus have been taxonomically revised by Asa Gray (1886), J. K. Small (1900), and R. B. Clark (1942) who primarily studied the North American taxa and by Arthur Cronquist (1945) who studied the New World representatives.

Bumelia reclinata (Michaux) Ventenat comprises three varieties, i.e., var. *reclinata*, var. *rufotomentosa* (Small) Cronquist, and var. *austrofloridensis* Whetstone. Of the more recent treatments, Clark (1942) recognized *B. rufotomentosa* and *B. reclinata* whereas Cronquist (1945) considered the two taxa as conspecific and relegated *B. rufotomentosa* to varietal status under the latter taxon. My conclusions are most similar to those of Cronquist but recognize the existence of a third variety that was overlooked by previous students (e.g., Cronquist, Clark, and Small who studied several specimens of var. *austrofloridensis*), perhaps due to the paucity of material available at that time. Those specimens studied by Small, Cronquist, and Clark were considered to belong to var. *reclinata*. The primary bases for my conclusions are close examination of almost 3,000 exsiccatae of *Bumelia* and field observations on all U.S. species.

Individuals of *B. reclinata* from the vicinity of Long Pine Key in the Florida Everglades are consistently and clearly separable from other taxa of the species by the following suite of character states:

- a. leaves persistently tawny-pubescent across the abaxial surface of the lamina;
- b. twigs essentially glabrous or glabrate;
- c. pedicels pubescent;
- d. inner and outer sepals pubescent;
- e. ovary pubescent;
- f. fruits basally pubescent; and
- g. fruits not exceeding 9 mm in length.

(See Table 1 for summary of key characteristics of all varieties.) Variety *austrofloridensis* is common in hammocks and slash pine flatwoods in the Florida Everglades. The known range extends from Long Pine Key to hammocks immediately east of the Key. It is noteworthy that all known localities are within the Everglades National Park. As far as I have determined, no other members of *B. reclinata* are sympatric although *B. celastrina* H.B.K. and *B. salicifolia* (L.) Swartz occur on the Key (Fig. 1). Due to the limited geographic distribution and rarity of this taxon, I offer the name "Everglades Buckthorn" for those individuals and governmental agencies dealing with threatened and endangered species.

KEY TO THE INFRASPECIFIC TAXA OF *B. RECLINATA*

- 1a. Abaxial surfaces of fully expanded leaves persistently pubescent across the lamina; twigs essentially glabrous; pedicels, inner and outer sepals strigose var. *austrofloridensis*
- 1b. Abaxial surfaces of fully expanded leaves glabrous or pubescent only along the midrib; twigs sparsely strigose (glabrate) to densely pubescent; pedicels, inner and outer sepals glabrous to densely strigose.

¹ The author gratefully acknowledges the loan of specimens from the herbaria cited herein (acronyms are from Holmgren et al., 1981, except "JSU," vide Whetstone, 1983). In addition, support for this study was provided by a grant from the Faculty Research Committee of Jacksonville State University to assist with field work on the Nearctic *Bumelia*. All conclusions and facts presented are those perceived by the author. This paper is an outgrowth of a treatment of the Sapotaceae for the "Vascular Flora of the Southeastern United States" (L. S. Radford, executive editor, in prep. Univ. of North Carolina Press, Chapel Hill). Descriptions generally follow the preferred format set forth by the editorial committee.

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TABLE 1. Comparison of key characteristics within varieties of *Bumelia reclinata*.

<i>rufotomentosa</i>	<i>reclinata</i>	<i>austrofloridensis</i>
Twigs densely strigose	Twigs glabrous	Twigs essentially glabrous
Leaf trichomes coppery	Leaf trichomes tawny	Leaf trichomes tawny
Leaf pubescence along abaxial surface of midvein	Leaf pubescence along abaxial surface of midvein	Leaf pubescence across the abaxial surface
Outer sepals and pedicels densely pubescent	Outer sepals and pedicels glabrous	Outer sepals and pedicels pubescent
Ovaries densely strigose at anthesis	Ovaries sparsely strigose at anthesis	Ovaries densely strigose at anthesis
Mature fruits ca. 11 mm long (or more)	Mature fruits ca. 9 mm long (or less)	Mature fruits ca. 9 mm long (or less)

- 2a. Leaves coppery pubescent on the petioles and along the abaxial surface of the midvein; twigs densely strigose; pedicels, inner and outer sepals densely pubescent
..... var. *rufotomentosa*
- 2b. Leaves rufous to tawny-pubescent (whitish) on the petioles and abaxial surface of the midvein (glabrate); twigs sparsely

strigose to glabrous; pedicels and outer sepals glabrous, inner sepals glabrous to pubescent var. *reclinata*

***Bumelia reclinata* (Michaux) Ventenat var. *austrofloridensis* Whetstone, var. nov. TYPE: United States. Florida: Dade County, Long**

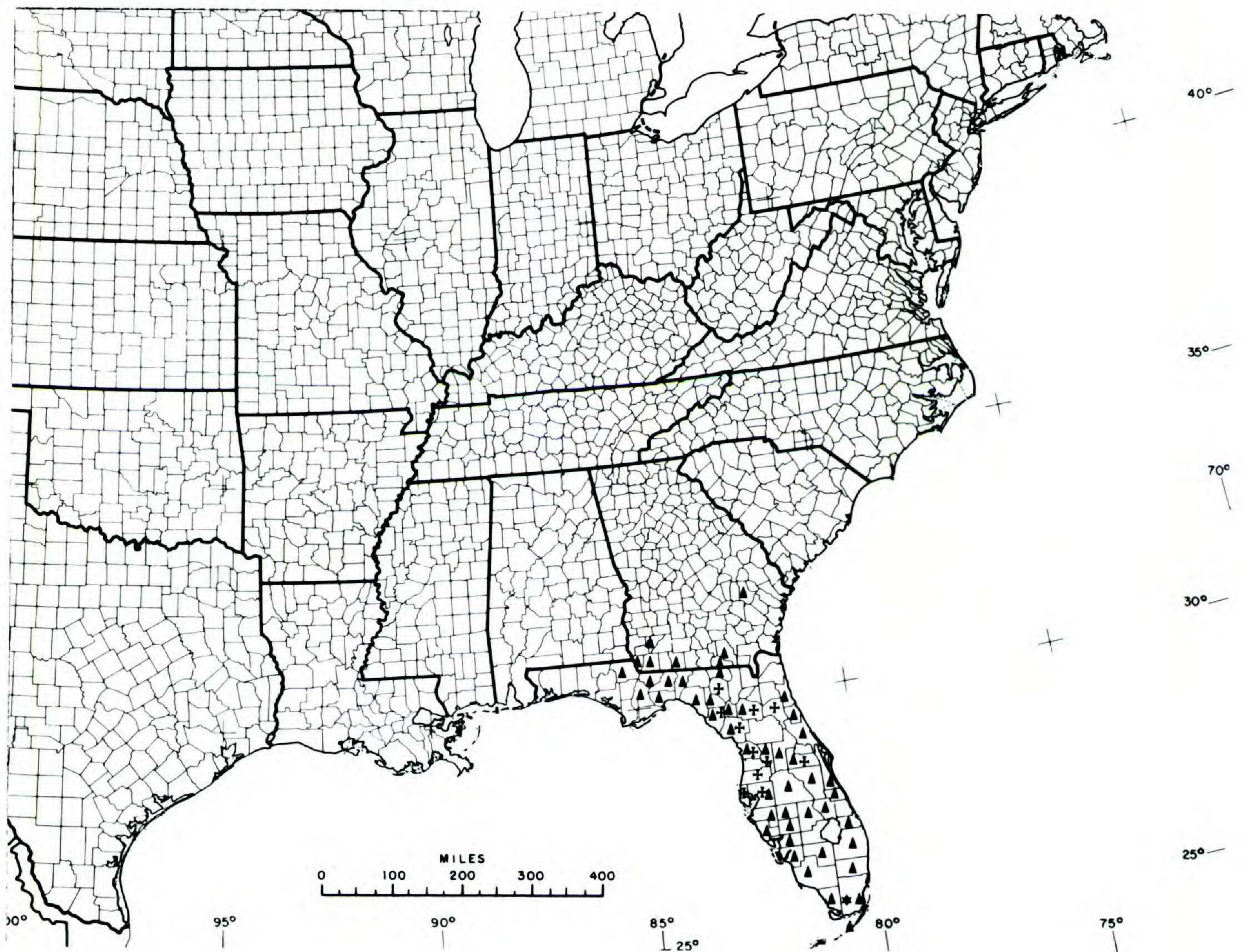


FIGURE 1. Map of the documented distribution of *Bumelia reclinata*. Triangle = var. *reclinata*; cross = var. *rufotomentosa*; and star = var. *austrofloridensis*.

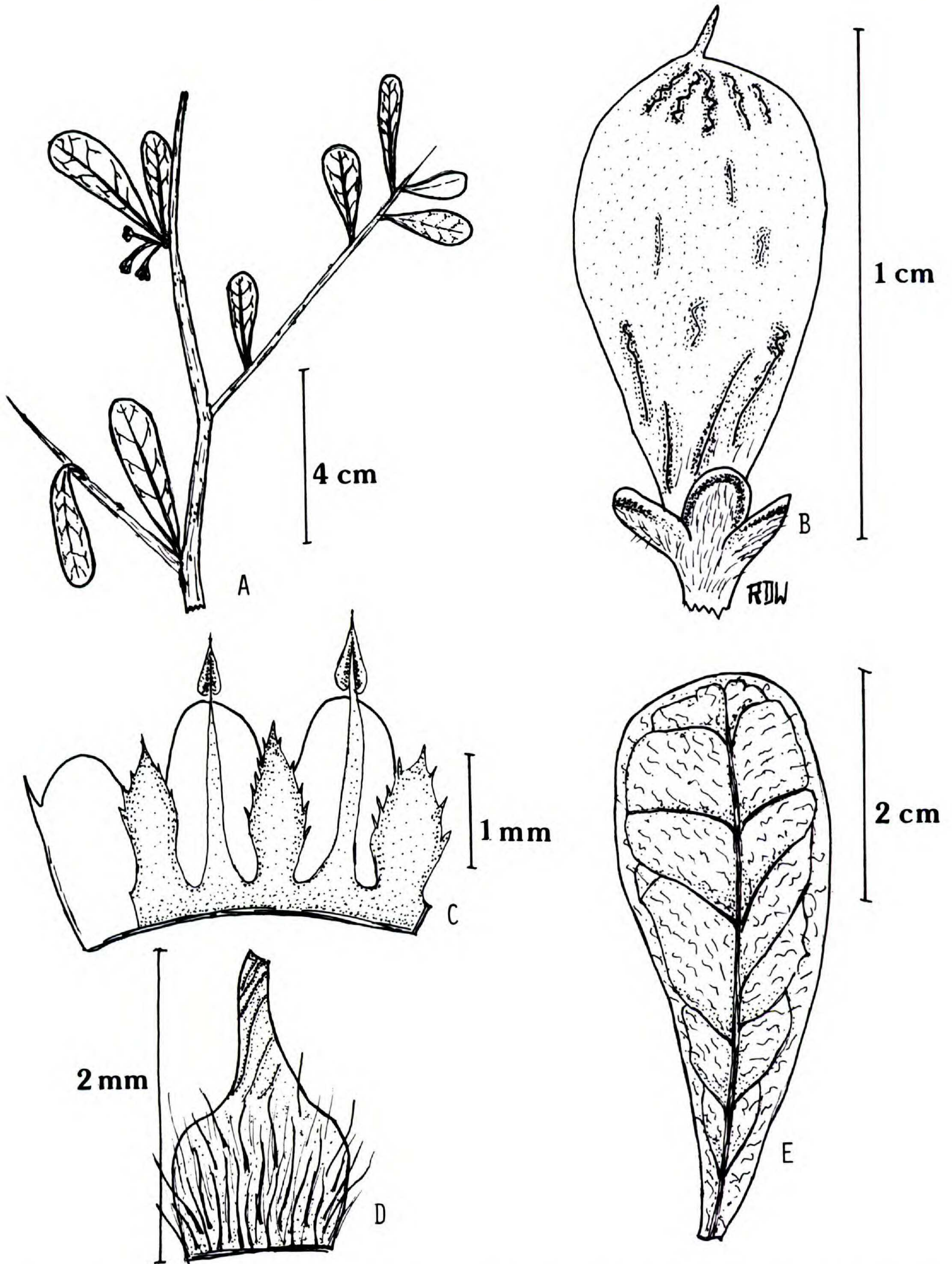


FIGURE 2. *Bumelia reclinata* var. *austrofloridensis*—A. Branch.—B. Fruit.—C. Adaxial view of androecium and corolla.—D. Gynoecium at anthesis.—E. Leaf details (blade).

Pine Key in the Everglades National Park, recently burned glade; over oolite. Abundant shrub, to ca. 1.5 m (isotypes collected from the same individual as holotype). 7 July 1984, *Whetstone 14459* (holotype, JSU 23555; isotypes, to be distributed to A, FLAS, FSU, MO, NCU, USF, VDB). Everglades Buckthorn. FIGURE 2.

Varietas nova *B. reclinata* optime distinguitur lobis calycis strigosis, ramunculo sparse strigoso ad glabrescens, ovario strigoso, et foliaris pubens persistens.

Small thorny shrubs. Twigs strigose, armed with thorns and knobby protuberances, essentially glabrous. Leaves evergreen, alternate to fascicled, oblanceolate, 1–4 cm long, fully expanded leaves with tawny pubescence on the abaxial surface of the lamina, apices rounded to emarginate, margins entire and somewhat revolute, bases acuminate with attenuate lamina forming an adaxial channel; petioles 2.5–3 mm long, densely pubescent basally. Flowers borne in loose, axillary fascicles at leafy and defoliated nodes. Flowers ca. 2.8 mm long, calyx of 5 imbricate sepals, sepals ovate, ca. 2 mm long, densely pubescent abaxially; corolla 5-lobed, whitish, lobes flared above the tube and broadly ovate with lateral appendages, margins erose; stamens epipetalous, anther slightly exerted, staminodes petaloid; gynoecium ca. 1.5 mm long, ovary

densely strigose, style and stigma glabrous; pedicels 4–5(–9) mm long, pubescent apically with rufous trichomes. Fruits obovoid, ca. 9 mm long (excluding the apiculate stylar remnant), slightly pubescent basally and occasionally apically. Seeds ovoid, light brown, ca. 7 mm long, scar basilateral with a smaller adjacent scar.

Specimens examined. UNITED STATES. FLORIDA: Dade Co., *Bessey 2* (A), *75* (A), *Craighead*, s.n. (FLAS 146613, 146614, 146617), *Godfrey et al. 63394* (FSU 86781, NCU 253411), *63460* (FSU 86487), *77025* (FSU 154085), *Hill & Harvey, III, 3215* (NCU 462019), *Korsakoff*, s.n. (FLAS 42452), *Rehder 898* (A), *Small & Carter 2912* (NY), *2986* (NY), *2988* (NY), *2988* (NY), *2988a* (NY), *Whetstone 14427* (JSU), *14470* (JSU), *14474* (JSU).

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